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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/810,595	03/15/2001	Belford T. Coursey	MI22-1660	8140

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WELLS ST. JOHN P.S.  
601 W. FIRST  
SUITE 1300  
SPOKANE, WA 99201-3828

EXAMINER

HUYNH, YENNHU B

ART UNIT	PAPER NUMBER
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2813

DATE MAILED: 07/01/2002

7

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

'09/810,595

Applicant(s)

COURSEY, BELFORD T.

Examiner

Yennhu B. Huynh

Art Unit

2813

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 26-47 is/are pending in the application.
- 4a) Of the above claim(s) 38-47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

Applicant's election without traverse of claims 26-37 in Paper No. 6 is acknowledged.

### *Specification*

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: A memory Circuitry With Peripheral Area.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

26, 27 Claims 26-28, 31, 34 & 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Lane et al. (U.S. 5,998, 257)

Lane et al. at figs. 1-14 in related art col. 1-10 disclose a memory circuitry device, which include:

Re. claim 26: a semiconductor substrate 12; a plurality of word lines 14, 16, 18 & 20 received over the semiconductor substrate; an insulating layer 44 over the wordlines and the substrate, the insulative layer having at least one well 46 formed therein, the well comprising a base received over the word lines, the well peripherally defining an outline of

a memory array area 42, area peripheral to the well comprising memory peripheral circuitry area; a plurality of memory cell storage capacitors received within the well over the word lines (col. 4, lines 6-13), and peripheral circuitry with the peripheral circuitry area operatively configured to write to and read from the memory array (col.4,5 lines 48-16).

Re. claim 27: wherein the base is substantially planar (col. 4, lines 46-47),✓

Re. claims 28 & 34: wherein the word lines have insulative caps 30 and the well base has lowest portion which is received above the caps.

Re. claims 31 & 36: wherein the insulative layer has a substantially planar outermost surface, and the capacitors have capacitor storage node electrodes having topmost surfaces received elevationally proximate the substantially outermost surface of the insulative layer (col.2, lines 27-39 & col.5, lines 43-62).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 28-30, 32, 34, 35 & 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lane et al. (U.S. 5,998,257).

Lane et al. disclose substantially all of claimed features except the height dimension constitutes a location which is remote on the substrate between the well base and tops of digit lines of word lines.

With respect to claims 28-30,32,34,35 & 37 the dimension constitutes a location which is remote on the substrate between the well base and tops of digit lines of word lines is considered to involve routine optimization while has been held to be within the level of ordinary skill in the art, As noted In re Aller, the selection of reaction parameters such as temperature and concentration would have been obvious.

"Normally, it is to expected that a change in temperature, or in range, concentration, cycles, thickness or dimension would be an unpatentable modification. Under some circumstance, however, changes such as these may be impart patentability to a process if the particular ranges claimed produce a new and unexpected result which is different in kind and not merely degree from the results of the prior art ... such ranges are termed "critical ranges and the applicant has the burden of proving such criticality ... More particularly, where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller 105 USPQ233, 255 (CCPA 1955). See also In re Waite 77 USPQ 586 (CCPA 1948); In re Scherl 70 USPQ 204 (CCPA 1946); In re Irmischer 66 USPQ 314 (CCPA 1945); In re Norman 66 USPQ 308 USPQ 308 (CCPA 1945); In re Swenson 56 USPQ 372 (CPA 1942); In re Sola 25 USPQ 433 (CCPA 1935); In re Dreyfus 24 USPQ 52 (CCPA 1934).

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It would have been obvious to one having skill in the art at the time the invention was made to combine the teachings from skill of the art in constituting a height dimension location which is on the substrate between the well base and tops of digit lines of word lines for specific preferred distance, into Lane et al.'s process. This modification would complete the memory circuitry device as claimed invention.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yennhu Huynh whose telephone number is (703)308-6110. The examiner can normally be reached on Monday-Friday from 8:00 AM to 4:30PM.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

YNBH,  
6/24/02.



OLIK CHAUDHURI  
SUPERVISORY PATENT EXAMINER  
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